

IN THE CLAIMS:

Please amend the claims as indicated below:

1. (Currently Amended) A method for allocating a resource to a mobile station in a wireless communications network having at least one mobile base station, said method comprising the steps of:

5 collecting measurements of interference and load in said wireless communications network, wherein said collected measurements include expected ~~nominal~~ resource availability information and measured resource availability information;

 processing said collected information to identify a resource for said mobile station; and

10 assigning said resource to said mobile station.

2. (Original) The method of claim 1, wherein said measurements are collected from both said mobile station and said base stations.

15 3. (Currently Amended) The method of claim 1, wherein said expected ~~nominal~~ resource availability information provides a measure of the load on said wireless communications network.

20 4. (Original) The method of claim 1, wherein said measured resource availability information provides a measure of the interference on said wireless communications network.

 5. (Currently Amended) The method of claim 1, wherein said expected ~~nominal~~ resource availability is an expected ~~nominal~~ capacity value for each band on said network less the number of users on said band.

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6. (Original) A method for allocating a resource to a mobile station in a wireless communications network having a plurality of base stations including at least one mobile base station, said method comprising the steps of:

collecting measurements of interference and load in said wireless communications network, wherein said collected measurements include received power measurements from neighboring base stations;

processing said collected information to identify a resource for said mobile station; and

assigning said resource to said mobile station.

7 (Original) The method of claim 6, wherein said power measurements are received from said neighboring base stations on a beacon channel.

8 (Original) The method of claim 6, wherein said received power measurements provide an indication of the distance to a neighboring base station.

9 (Original) The method of claim 6, wherein said measurements are collected from both said mobile station and said base stations.

10. (Original) A method for allocating a resource to a mobile station in a wireless communications network having a plurality of base stations including at least one mobile base station, said method comprising the steps of:

collecting measurements of interference and load in said wireless communications network, wherein said collected measurements include predicted new load information;

processing said collected information to identify a resource for said mobile station; and

assigning said resource to said mobile station

11. (Previously Presented) The method of claim 10, wherein said predicted new load, $\mu_{l,i}^D$, is computed as follows:

$$\mu_{l,i}^D = p_{l,i}^D \sum_{k=1}^K \lambda_k^D,$$

where $p_{l,i}^D$ is a probability of assigning a resource to a band and λ_k^D are a number of users over a downlink band.

12. (Original) A method for allocating a resource to a mobile station in a wireless communications network having a plurality of base stations including at least one mobile base station, said method comprising the steps of:

collecting measurements of interference and load in said wireless communications network;

processing said collected information to identify a resource for said mobile station such that said resource allocation minimizes a call drop rate; and

assigning said resource to said mobile station.

13 (Original) The method of claim 12, wherein said call drop rate ensures that a resource will not be assigned to said mobile station if a likelihood that allocating said resource to said mobile station will cause another mobile station to be dropped exceeds a predefined threshold.

14. (Original) A system for allocating a resource to a mobile station in a wireless communications network having at least one mobile base station, said system comprising:

a memory for storing computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

collect measurements of interference and load in said wireless communications network, wherein said collected measurements include nominal resource availability information

and measured resource availability information;

process said collected information to identify a resource for said mobile station;

and

assign said resource to said mobile station.

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15 (Original) The system of claim 14, wherein said measurements are collected from both said mobile station and said base stations.

16. (Original) The system of claim 14, wherein said nominal resource availability
10 information provides a measure of the load on said wireless communications network.

17. (Original) The system of claim 14, wherein said measured resource availability information provides a measure of the interference on said wireless communications network

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18. (Original) The system of claim 14, wherein said nominal resource availability is a nominal capacity value for each band on said network less the number of users on said band

19. (Original) A system for allocating a resource to a mobile station in a wireless
20 communications network having a plurality of base stations including at least one mobile base station, said system comprising:

a memory for storing computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

collect measurements of interference and load in said wireless communications

25 network, wherein said collected measurements include received power measurements from neighboring base stations;

process said collected information to identify a resource for said mobile station;

and

assign said resource to said mobile station.

20 (Original) The system of claim 19, wherein said power measurements are received from said neighboring base stations on a beacon channel.

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21 (Original) The system of claim 19, wherein said received power measurements provide an indication of the distance to a neighboring base station.

22 (Original) The system of claim 19, wherein said measurements are collected
10 from both said mobile station and said base stations.

23 (Original) A system for allocating a resource to a mobile station in a wireless communications network having a plurality of base stations including at least one mobile base station, said system comprising:

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a memory for storing computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

collect measurements of interference and load in said wireless communications network, wherein said collected measurements include predicted new load information;

process said collected information to identify a resource for said mobile station;

20 and

assign said resource to said mobile station.

24. (Previously Presented) The system of claim 23, wherein said predicted new load, $\mu_{l,i}^D$, is computed as follows:

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$$\mu_{l,i}^D = p_{l,i}^D \sum_{k=1}^K \lambda_k^D,$$

where $p_{l,i}^D$ is a probability of assigning a resource to a band and λ_k^D are a number of users over

a downlink band.

25. (Original) A system for allocating a resource to a mobile station in a wireless communications network having a plurality of base stations including at least one mobile base station, said system comprising:

collecting measurements of interference and load in said wireless communications network;

processing said collected information to identify a resource for said mobile station such that said resource allocation minimizes a call drop rate; and

assigning said resource to said mobile station.

26. (Original) The system of claim 25, wherein said call drop rate ensures that a resource will not be assigned to said mobile station if a likelihood that allocating said resource to said mobile station will cause another mobile station to be dropped exceeds a predefined threshold